R309-605. Source Protection: Drinking Water Source Protection For Surface Water Sources.

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R309-605-1. Purpose.

Public Water Systems (PWSs) are responsible for protecting their sources of drinking water from contamination. R309-605 sets forth minimum requirements to establish a uniform, statewide program for implementation by PWSs to protect their surface water sources of drinking water. PWSs are encouraged to enact more stringent programs to protect their sources of drinking water if they decide additional measures are necessary.

R309-605 applies to PWSs which obtain surface water prior to treatment and distribution and to PWSs obtaining water from ground-water sources which are under the direct influence of surface water. However, compliance with this rule is voluntary for public (transient) non-community water systems to the extent that they are using existing surface water sources of drinking water.

R309-605-2. Authority.

Under authority of Subsection 19-4-104(1)(a)(iv), the Drinking Water Board adopts this rule which governs the protection of surface sources of drinking water.

R309-605-3. Definitions.

(1) The following terms are defined for the purposes of this rule:

(a) "Controls" means the codes, ordinances, rules, and regulations that regulate a potential contamination source. "Controls" also means physical controls which may prevent contaminants from migrating off of a site and into surface or ground water. Controls also means negligible quantities of contaminants.

(b) "Division" means Division of Drinking Water.

(c) "DWSP Program" means the program and associated plans to protect drinking water sources from contaminants.

(d) "DWSP Zone" means the surface and subsurface area surrounding a surface source of drinking water supplying a PWS, over which or through which contaminants are reasonably likely to move toward and reach the source.

(e) "Designated person" means the person appointed by a PWS to ensure that the requirements of R309-605 are met.

(f) "Director" means the Director of the Division of Drinking Water.

(g) "Existing surface water source of drinking water" means a public supply surface water source for which plans and specifications were submitted to DDW on or before June 12, 2000.

(h) "Intake", for the purposes of surface water drinking water source protection, means the device used to divert surface water and also the conveyance to the point immediately preceding treatment, or, if no treatment is provided, at the entry point to the distribution system.

(i) "Land management strategies" means zoning and non-zoning controls which include, but are not limited to, the following: zoning and subdivision ordinances, site plan reviews, design and operating standards, source prohibitions, purchase of property and development rights, public education programs, ground-water monitoring, household hazardous waste collection programs, water conservation programs, memoranda of understanding, and written contracts and agreements.

(j) "New surface water source of drinking water" means a public supply surface water source of drinking water for which plans and specifications are submitted to the Director after June 12, 2000.

(k) "Nonpoint source" means any area or conveyance not meeting the definition of point source.

(l) "Point of diversion" (POD) is the location at which water from a surface source enters a piped conveyance, storage tank, or is otherwise removed from open exposure prior to treatment.

(m) "Point source" means any discernible, confined, and discrete location or conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, animal feeding operation with more than ten animal units, landfill, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

(n) "Pollution source" means point source discharges of contaminants to surface water or potential discharges of the liquid forms of "extremely hazardous substances" which are stored in containers in excess of "applicable threshold planning quantities" as specified in the Emergency Planning and Community Right-to-Know Act (EPCRA),42 U.S.C. 11001 et seq. (1986). Examples of possible pollution sources include, but are not limited to, the following: storage facilities that store the liquid forms of extremely hazardous substances, septic tanks, drain fields, class V underground injection wells, landfills, open dumps, land filling of sludge and septage, manure piles, salt piles, pit privies, drain lines, and animal feeding operations with more than ten animal units. The following definitions are

part of R309-605 and clarify the meaning of "pollution source:"

(i) "Animal feeding operation" means a lot or facility where the following conditions are met: animals have been or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12 month period, and crops, vegetation forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility. Two or more animal feeding operations under common ownership are considered to be a single feeding operation if they adjoin each other, if they use a common area, or if they use a common system for the disposal of wastes.

(ii) "Animal unit" means a unit of measurement for any animal feeding operation calculated by adding the following numbers; the number of slaughter and feeder cattle multiplied by 1.0, plus the number of mature dairy cattle multiplied by 1.4, plus the number of swine weighing over 55 pounds multiplied by 0.4, plus the number of sheep multiplied by 0.1, plus the number of horses multiplied by 2.0.

(iii) "Extremely hazardous substances" means those substances which are identified in the Sec. 302(EHS) column of the "TITLE III LIST OF LISTS - Consolidated List of Chemicals Subject to Reporting Under SARA Title III," (EPA 550-B-96-015). A copy of this document may be obtained from: NCEPI, PO Box 42419, Cincinnati, OH 45202. Online ordering is also available at: http://www.epa.gov/ncepihom/orderpub.html.

(o) "Potential contamination source" means any facility or site which employs an activity or procedure or stores materials which may potentially contaminate ground-water or surface water. A pollution source is also a potential contamination source.

(p) "PWS" means a public water system affected by this rule, as described in R309-605-1.

(q) "Surface water" means all water which is open to the atmosphere and subject to surface runoff (see also R309-515-5(1)).

(r) "Susceptibility" means the potential for a PWS to draw water contaminated above a demonstrated background water quality concentration through any combination of the following pathways: geologic strata and overlying soil, direct discharge, overland flow, upgradient water, cracks/fissures in or open areas of the surface water intake and/or the pipe/conveyance between the intake and the water distribution system. Susceptibility is determined at the point immediately preceding treatment or, if no treatment is provided, at the entry point to the system.

(s) "Watershed" means the topographic boundary, up to the state's border, that is the perimeter of the catchment basin that provides water to the intake structure.

R309-605-4. Implementation.

(1) **Existing Surface Water Sources** - Each PWS shall submit a Drinking Water Source Protection (DWSP) Plan to the Division of Drinking Water (Division) in accordance with R309-605-7 for each of its existing surface water sources according to the following schedule.

TABLE

Schedule for DWSP Plan Submittal

Population served by PWS	**DWSP Plans due by**
Greater than 10,000	December 31, 2001
3,300 to 10,000	May 6, 2002
Fewer than 3,300	May 6, 2003

(2) **New surface water sources** - Each PWS shall submit a Preliminary Evaluation Report (PER) in accordance with R309-605-9 for each of its new surface water sources to the Director.

R309-605-5. Exceptions.

(1) Exceptions to the requirements of R309-605 or parts thereof may be granted by the Director to a PWS if, due to compelling factors (which may include economic factors), a PWS is unable to comply with these requirements, and the granting of an exception will not result in an unreasonable risk to health.

(2) The Director may prescribe a schedule by which the PWS must come into compliance with the requirements of R309-605.

R309-605-6. Designated Person.

(1) Each PWS shall designate a person responsible for demonstrating the PWS's compliance with these rules. A designated person shall be appointed and reported in writing to the Director by each PWS within 180 days of the effective date of R309-605. The name, address and telephone number of the designated person shall be included in each DWSP Plan and PER that is submitted to the Director, and in all other correspondence with the Division.

(2) Each PWS shall notify the Director in writing within 30 days of any changes in the appointment of a designated person.

R309-605-7. Drinking Water Source Protection (DWSP) for Surface Sources.

(1) **DWSP Plans**

(a) Each PWS shall develop, submit, and implement a DWSP Plan for each of its surface water sources of drinking water.

(i) Recognizing that more than one PWS may jointly use a source from the same or nearby diversions, the Director encourages collaboration among such PWSs with joint use of a source in the development of a DWSP plan for that source. PWSs who jointly submit an acceptable DWSP plan per R309-605-7 for one surface water source above common point(s) of diversion, will be considered to have met the requirement of R309-605-7(1)(a). The deadline from R309-605-4(1) that would apply to such a collaboration would be associated with the largest population served by the individual parties to the agreement.

(b) **Required Sections for DWSP Plans** - DWSP Plans should be developed in accordance with the "Standard Report Format for Surface Sources". This document may be obtained from the Division. DWSP Plans must include the following eight sections:

(i) **DWSP Delineation Report** - A DWSP Delineation Report in accordance with R309-605-7(3) is the first section of a DWSP Plan.

(ii) **Susceptibility Analysis and Determination** - A susceptibility analysis and determination in accordance with R309-605-7(4) is the second section of a DWSP report.

(iii) **Management Program to Control Each Preexisting Potential Contamination Source** - Land management strategies to control each not adequately controlled preexisting potential contamination source in accordance with R309-605-7(5) is the third section of a DWSP Plan.

(iv) **Management Program to Control or Prohibit Future Potential Contamination Sources** - Land management strategies for controlling or prohibiting future potential contamination sources is the fourth section of a DWSP Plan. This must be in accordance with R309-605-7(6), must be consistent with the general provisions of this rule, and implemented to an extent allowed under the PWS's authority and jurisdiction.

(v) **Implementation Schedule** - The implementation schedule is the fifth section of a DWSP Plan. Each PWS shall develop a step-by-step implementation schedule which lists each of its proposed land management strategies with an implementation date for each strategy.

(vi) **Resource Evaluation** - The resource evaluation is the sixth section of a DWSP Plan. Each PWS shall assess the financial and other resources which may be required for it to implement each of its DWSP Plans and determine how these resources may be acquired.

(vii) **Recordkeeping** - Recordkeeping is the seventh section of a DWSP Plan. Each PWS shall document changes in each of its DWSP Plans as they are updated to show significant changes in conditions in the protection zones. As a DWSP Plan is executed, the PWS shall document any land management strategies that are implemented. These documents may include any of the following: ordinances, codes, permits, memoranda of understanding, public education programs, and so forth.

(viii) **Public Notification** - A method for, schedule for and example of the means for notifying the public water system's customers and consumers regarding the drinking water source water assessment and the results of that assessment is the last section of a DWSP plan. This must be in accordance with R309-605-7(7).

(ix) **Existing watershed or resource management plans** - In lieu of some or all of the report sections described in R309-605-7(1)(b), the PWS may submit watershed or resource management plans that in whole or in part meet the requirements of this rule. Such plans shall be submitted to the Director with a cover letter that fully explains how they meet the requirements of the current DWSP rules. Any required section described in R309-605-7(1)(b) that is not covered by the watershed or resource management plan must be addressed and submitted jointly. The watershed or resource management plans will be subject to the same review and approval process as any other section of the DWSP plan.

(c) **DWSP Plan Administration** - DWSP Plans shall be submitted, corrected, retained, implemented, updated, and revised according to the following:

(i) **Submitting DWSP Plans** - Each PWS shall submit a DWSP Plan to the Director in accordance with the schedule in R309-605-4(2) for each of its surface water sources of drinking water (a joint development and submittal of a DWSP plan is acceptable for PWSs with the joint use of a source, per R309-605-7(1)(a)(i).)

(ii) **Correcting Deficiencies** - Each PWS shall correct any deficiencies in a disapproved DWSP Plan and resubmit it to the Director within 90 days of the disapproval date.

(iii) **Retaining DWSP Plans** - Each PWS shall retain on its premises a current copy of each of its DWSP Plans. DWSP Plans shall be made available to the public upon request.

(iv) **Implementing DWSP Plans** - Each PWS shall begin implementing each of its DWSP Plans in accordance with its schedule in R309-605-7(1)(b)(v), within 180 days after submittal if they are not disapproved by the Director.

(v) **Updating and Resubmitting DWSP Plans** - Each PWS shall review and update its DWSP Plans as often as necessary to ensure that they show current conditions in the DWSP zones, but at least annually after the original due date (see R309-605-4(1)). Updated plans also document the implementation of land management strategies in the recordkeeping section. Updated DWSP Plans will be resubmitted to the Director every six years from their original due date, which is described in R309-605-4.

(vi) **Revising DWSP Plans** - Each PWS shall submit a revised DWSP Plan to the Director within 180 days after the reconstruction or redevelopment of any surface water source of drinking water which causes changes in source construction, source development, hydrogeology, delineation, potential contamination sources, or proposed land management strategies.

(2) **DWSP Plan Review.**

(a) The Director shall review each DWSP Plan submitted by PWSs and "concur," "conditionally concur" or "disapprove" the plan. The Director may also authorize the designated DDW Source Protection Manager to issue the following actions: "concur."

(b) The Director may "disapprove" DWSP Plans for good cause, including any of the following reasons:

(i) A DWSP Plan that is missing the delineation report or any of the information and data required in it (refer to R309-605-7(3));

(ii) An inaccurate Susceptibility Analysis or a DWSP Plan that is missing this report or any of the information required in it (refer to R309-605-7(4));

(iii) An inaccurate Prioritized Inventory of Potential Contamination Sources or a DWSP Plan that is missing this report or any of the information required in it (refer to R309-605-7(4)(c));

(iv) An inaccurate assessment of current controls (refer to R309-605-7(4)(a)(iii)(B));

(v) A missing or incomplete Management Program to Control Each Preexisting Potential Contamination Source which has been assessed as "not

adequately controlled" by the PWS (refer to R309-605-7(5));

(vi) A missing or incomplete Management Program to Control or Prohibit Future Potential Contamination Sources (refer to R309-605-7(6));

(vii) A missing Implementation Schedule, Resource Evaluation, Recordkeeping Section, or Contingency Plan (refer to R309-605-7(1)(b)(v-vii) and R309-605-9);

(viii) A missing or incomplete Public Notification Section (refer to R309-605-7(7).

(c) If the Director conditionally concurs with a DWSP Plan, the PWS must implement the conditions and report compliance the next time the DWSP Plan is due and submitted to the Director.

(3) **Delineation of Protection Zones**

(a) The delineation section of the DWSP plan for surface water sources may be obtained from the Division upon request. A delineation section prepared and provided by the Division would become the first section of the submittal from the PWS. The delineation section provided by the Division will consist of a map or maps showing the limits of the zones described in R309-605-7(3)(b)(i-iv), and will include an inventory of potential contamination sources on record in the Division's Geographic Information System.

(b) Alternatively, the PWS may provide their own delineation report. Such a submittal must either describe the zones as defined in R309-605-7(3)(b)(i-iv), or must comply with the requirements and definitions of R309-605-7(3)(c). The delineation report must include a map or maps showing the extent of the zones.

(i) **Zone 1:**

(A) Streams, rivers and canals: zone 1 encompasses the area on both sides of the source, 1/2 mile on each side measured laterally from the high water mark of the source (bank full), and from 100 feet downstream of the POD to 15 miles upstream, or to the limits of the watershed or to the state line, whichever comes first. If a natural stream or river is diverted into an uncovered canal or aqueduct for the purpose of delivering water to a system or a water treatment facility, that entire canal will be considered to be part of zone 1, and the 15 mile measurement upstream will apply to the stream or river contributing water to the system from the diversion.

(B) **Reservoirs or lakes:** zone 1 is considered to be the area 1/2 mile from the high water mark of the source. Any stream or river

contributing to the lake/reservoir will be included in zone 1 for a distance of 15 miles upstream, and 1/2 mile laterally on both sides of the source. If a reservoir is diverted into an uncovered canal or aqueduct for the purpose of delivering water to a system or a water treatment facility, that entire canal will be considered to be part of zone 1, and the 15 mile measurement upstream will apply to the reservoir and tributaries contributing water to the system.

(ii) **Zone 2:** Zone 2 is defined as the area from the end of zone 1, and an additional 50 miles upstream (or to the limits of the watershed or to the state line, whichever comes first), and 1000 feet on each side measured from the high water mark of the source.

(iii) **Zone 3:** Zone 3 is defined as the area from the end of zone 2 to the limits of the watershed or to the state line, whichever comes first, and 500 feet on each side measured from the high water mark of the source.

(iv) **Zone 4:** Zone 4 is defined as the remainder of the area of the watershed (up to the state line, if applicable) contributing to the source that does not fall within the boundaries of zones 1 through 3.

(v) **Special case delineations:**

(A) **Basin Transfer PODs:** Where water supplies are received from basin transfers, the water from the extraneous basin will be treated as a separate source, and will be subject to its own DWSP plan, starting from zone 1 at the secondary POD.

(c) If the PWS is able to demonstrate that a different zone configuration is more protective than those defined in R309-605-7(3)(b), that different configuration may be used upon prior review and approval by the Director. An explanation of the method used to obtain and establish the dimensions of the zones must be provided. The delineation report must include a map or maps showing the extent of the zones. The entire watershed boundary contributing to a source must be included in the delineation.

(4) **Susceptibility Analysis and Determination:**

(a) **Susceptibility Analysis:**

(i) **Structural integrity of the intake:** The PWS will evaluate the structural integrity of the intake to ensure compliance with the existing source development rule (R309-515-5) on a pass or fail basis. The pass-fail rating will be determined by whether the intake meets minimum rule requirements, and whether the physical condition of the intake is adequate to protect the intake from contamination events. The integrity evaluation

includes any portion of the conveyance from the point of diversion to the distribution systems that is open to the atmosphere or is otherwise vulnerable to contamination, including distribution canals, etc.

(ii) **Sensitivity of Natural Setting:** The PWS will evaluate the sensitivity of the source based on physiographic and/or hydrogeologic factors. Factors influencing sensitivity may include any natural or man-made feature that increases or decreases the likelihood of contamination. Sensitivity does not address the question of whether contamination is present in the watershed or recharge area.

(iii) **Assessment of management of potential contamination sources:**

(A) **Potential Contamination Source Inventory**

(I) Each PWS shall identify and list all potential contamination sources within DWSP zones 1, 2 and 3, as applicable for individual sources. The name and address of each non-residential potential contamination source is required, as well as a list of the chemical, biological, and/or radiological hazards associated with each potential contamination source. Additionally, each PWS shall identify each potential contamination source as to its location in zone one, two, or three and plot it on the map required in R309-605-7(3)(a and b). The PWS may rely on the inventory provided by the Division for zone 4.

(II) **List of Potential Contamination Sources** - A List of Potential Contamination Sources may be obtained from the Division. This list may be used by PWSs as an introduction to inventorying potential contamination sources within their DWSP zones. The list is not intended to be all-inclusive.

(III) **Refining, Expanding, Updating, and Verifying Potential Contamination Sources** - Each PWS shall update its list of potential contamination sources to show current conditions within DWSP zones according to R309-605-7(1)(c)(v). This includes adding potential contamination sources which have moved into DWSP zones, deleting potential contamination sources which have moved out, improving available data about potential contamination sources, and all other appropriate refinements.

(B) **Identification and Assessment of Controls:** The PWS will identify and assess the hazards at each potential contamination source, including those in the inventory provided by the Division that

are located in zone 4, as "adequately controlled" or "not adequately controlled".

(I) If controls are not identified, the potential contamination source will be considered "not adequately controlled." Additionally, if the hazards at a potential contamination source cannot be or are not identified, the potential contamination source must be assessed as "not adequately controlled."

(II) **Types of controls:** For each hazard deemed to be controlled, one of the following controls shall be identified: regulatory, best management/pollution prevention, or physical controls. Negligible quantities of contaminants are also considered a control. The assessment of controls will not be considered complete unless the controls are completely evaluated and discussed in the DWSP report, using the following criteria:

Regulatory Controls - Identify the enforcement agency and verify that the hazard is being regulated by them; cite and/or quote applicable references in the regulation, rule or ordinance which pertain to controlling the hazard; explain how the regulatory controls affect the potential for surface water contamination; assess the hazard; and set a date to reassess the hazard. For assistance in identifying regulatory controls, refer to the "Source Protection User's Guide" Appendix D for a list of government agencies and the programs they administer to control potential contamination sources. This guide may be obtained from the Division.

Best Management/Pollution Prevention Practice Controls - List the specific best management/pollution prevention practices which have been implemented by potential contamination source management to control the hazard and indicate that they are willing to continue the use of these practices; explain how these practices affect the potential for surface water contamination; assess the hazard; and set a date to reassess the hazard.

Physical Controls - Describe the physical control(s) which have been constructed to control the hazard; explain how these controls affect the potential for contamination; assess the hazard; and set a date to reassess the hazard.

Negligible Quantity Control - Identify the quantity of the

hazard that is being used, disposed, stored, manufactured, and/or transported; explain why this amount is a negligible quantity; assess the hazard; and set a date to reassess the hazard.

(III) PWSs may assess controls on Potential Contamination Sources collectively, when the Potential Contamination Sources have similar characteristics, or when the Potential Contamination Sources are clustered geographically. Examples may include, but are not limited to, abandoned mines that are part of the same mining districts, underground storage tanks that are in the same zone, or leaking underground storage tanks in the same city. However, care should be taken to avoid collectively assessing Potential Contamination Sources to the extent that the assessments become meaningless. The Director may require an individual assessment for a Potential Contamination Source if the Director determines that the collective assessment does not adequately assess controls.

(C) A potential contamination source which is covered by a permit or approval under one of the regulatory programs listed below shall be considered to be adequately controlled unless otherwise determined by the Director. The PWS must provide documentation establishing that the Potential Contamination Source is covered by the regulatory program. For all other state regulatory programs, the PWS's assessment is subject to review by the Director; as a result, a PWS's DWSP Plan may be disapproved if the Director does not concur with its assessment(s).

(I) The Utah Ground-Water Quality Protection program established by Section 19-5-104 and Rule R317-6;

(II) Closure plans or Part B permits under authority of the Resource Conservation and Recovery Act (RCRA) of 1984 regarding the monitoring and treatment of ground-water;

(III) The Utah Pollutant Discharge Elimination System (UPDES) established by Section 19-5-104 and Rule R317-8; at the discretion of the PWS, this may include Confined Animal feeding Operations/Animal Feeding Operations (CAFO/AFO) assessed under the Utah DWQ CAFO/AFO Strategy.

(IV) The Underground Storage Tank Program established by Section 19-6-403 and Rules R311-200 through R311-208;

and

(V) the Underground Injection Control (UIC) Program for classes I-IV established by Sections 19-5-104 and 40-6-5 and Rules R317-7 and R649-5.

(b) **Susceptibility determination:**

(i) The PWS will assess the drinking water source for its susceptibility relative to each potential contamination source. The determination will be based on the following four factors: 1) the structural integrity of the intake, 2) the sensitivity of the natural setting, 3) whether a Potential Contamination Source is considered controlled or not, and 4) how the first three factors are interrelated.

The PWS will provide an explanation of the method or judgement used to weigh the first three factors against each other to determine susceptibility.

(ii) Additionally, each drinking water source will be assessed by the PWS for its overall susceptibility to potential contamination events. This will result in a qualitative assessment of the susceptibility of the drinking water source to contamination. This assessment of overall susceptibility allows the PWS and others to compare the susceptibility of one drinking water source to another.

(iii) Each surface water drinking water source in the state of Utah is initially considered to have a high susceptibility to contamination, due to the intrinsic unprotected nature of surface water sources. An assumption of high susceptibility will be used by the Director unless a PWS or a group of PWSs demonstrates otherwise, per R309-605, and receives concurrence from the Director under R309-605-7(2).

(c) **Prioritized Potential Contamination Source Inventory:** The PWS will prepare a prioritized inventory of potential contamination sources based on the susceptibility determinations in R309-605-7(4)(b)(i). The inventory will rank potential contamination sources based on the degree of threat posed to the drinking water source as determined in R309-605-7(4)(b)(i).

(5) **Management Program to Control Each Preexisting Potential Contamination Source.**

(a) PWSs are not required to plan and implement land management strategies for potential contamination source hazards that are assessed as "adequately controlled."

(b) With the first submittal of the DWSP Plan, PWSs shall include management strategies to reduce the risk of contamination from, at a minimum, each of the three

highest priority uncontrolled Potential Contamination Sources in the protection zones for the source. The Director may require land management strategies for additional Potential Contamination Sources to assure adequate protection of the source. A management plan may be for one specific Potential Contamination Source (i.e., a sewage lagoon discharging into a stream), or for a group of similar or related Potential Contamination Sources that were assessed jointly under R309-605-7(4)(a)(iii)(B)(III) (i.e., one management plan for septic systems within one residential development would be acceptable, and would count as one of the three Potential Contamination Source management strategies).

PWSs shall plan land management strategies to control preexisting uncontrolled potential contamination sources in accordance with their existing authority and jurisdiction. Land management strategies must be consistent with the provisions of R309-605, designed to control or reduce the risk of potential contamination, and may be regulatory or non-regulatory. Land management strategies must be implemented according to the schedule required in R309-605-7(1)(b)(v).

(c) PWSs with overlapping protection zones may cooperate in controlling a particular preexisting potential contamination source if one PWS will agree to take the lead in planning and implementing land management strategies. The remaining PWS(s) will assess the preexisting potential contamination source as "adequately controlled."

(d) At each six year cycle for revising and resubmitting the DWSP Plan, under the schedule in R309-605-7(1)(c)(v), the PWS shall prioritize their inventory again, and shall propose a management program to control preexisting Potential Contamination Sources for the three highest priority Potential Contamination Sources, which may include uncontrolled Potential Contamination Sources not previously managed. The PWS shall also continue existing management programs, unless justification is provided that demonstrates that a Potential Contamination Source that was previously managed is now considered controlled.

(6) **Management Program to Control or Prohibit Future Potential Contamination Sources for Existing Drinking Water Sources.**

(a) PWSs shall plan land management strategies to control or prohibit future potential contamination sources within each of its DWSP zones consistent with the provisions of R309-605 and to the extent allowed under its authority and jurisdiction. Land management strategies must be designed to control or reduce the risk of potential contamination and may be regulatory or non-regulatory. Additionally land management strategies must be implemented according to the schedule required in R309-605-7(1)(b)(v).

(b) Protection areas may extend into neighboring cities, towns, and counties. Since it may not be possible for some PWSs to enact regulatory land management strategies outside of their jurisdiction, except for municipalities as described below,

it is recommended that these PWSs contact their neighboring cities, towns, and counties to see if they are willing to implement protective ordinances to prevent surface water contamination under joint management agreements.

(c) Cities and towns have extraterritorial jurisdiction in accordance with Section 10-8-15 of the Utah Code Annotated to enact ordinances to protect a stream or "source" from which their water is taken... " for 15 miles above the point from which it is taken and for a distance of 300 feet on each side of such stream...."

(d) Zoning ordinances are an effective means to control potential contamination sources that may want to move into protection areas.

They allow PWSs to prohibit facilities that would discharge contaminants directly to surface water. They also allow PWSs to review plans from potential contamination sources to ensure there will be adequate spill protection and waste disposal procedures, etc.

If zoning ordinances are not used, PWSs must establish a plan to contact potential contamination sources individually as they move into protection areas, identify and assess their controls, and plan land management strategies if they are not adequately controlled.

(7) **Public Notification:**

Within their DWSP report, each PWS shall specify the method and schedule for notifying their customers and consumers that an assessment of their surface water source has been completed and what the results of that assessment are. Each PWS shall provide the proposed public notification material as an appendix to the DWSP report. The public notification material shall include a discussion of the general geologic and physical setting of the source, the sensitivity of the setting, general types of potential contamination sources in the area, how susceptible the drinking water source is to potential contamination and a map showing the location of the drinking water source and generalized areas of potential concern (it is not mandatory to show the location of the intake itself). The public notification material will be in plain English. The purpose of this public notification is to advise the public regarding how susceptible their drinking water source is to potential contamination sources. Examples of means of notifying the public, and examples of acceptable public notification materials, are available from the Division. The public notification materials must be approved by the Director prior to distribution.

R309-605-8. DWSP for Ground-Water Sources Under the Direct Influence of Surface Water Sources.

(1) DWSP for ground-water sources under the direct influence of surface water sources will be accomplished through delineation of both the ground-water and surface water contribution areas. The requirements of R309-600 will apply to the ground-water portion,

and the requirements of R309-605 will apply to the surface water portion, except that the schedule for such DWSP plans under this section will be based on the schedule shown in R309-605-4(1).

R309-605-9. New Surface Water Sources of Drinking Water.

(1) Prior to constructing a new surface water source of drinking water, each PWS shall develop a preliminary evaluation report (PER) which demonstrates that the source location has been chosen such that the number of uncontrolled sources in zones 1 and 2 is minimized. If the source water is not currently classified as Class 1C under UAC R317-2, the PWS must request such a classification from the Water Quality Board for zones 1 and 2. The PWS must also request that the source water be categorized as High Quality Waters - Category 1 or 2 under UAC R317-2-3 (Antidegradation Policy), if applicable. In addition, engineering information in accordance with R309-515-4 and R309-515-5 (general source development and surface water source development requirements) must be submitted to the Director concurrent with the PER. A complete DWSP plan is required, one year after approval of the PER and after construction of the source intake, following the requirements of R309-605-7.

(2) **Preliminary Evaluation Report (PER) for New Sources of Drinking Water** - PERs shall cover all four zones. PERs should be developed in accordance with the "Standard Report Format for New Surface Sources." This document may be obtained from the Division. PWSs shall include the following four sections in each PER:

(a) **Delineation Report for Estimated DWSP Zones** - The same requirements apply as in R309-605-7(3).

(b) **Susceptibility Analysis and determination (including inventory)** - The same requirements apply as in R309-605-7(4).

(c) **Land Use Map** - A land use map which includes all land within zones one and two and the primary use of the land (residential, commercial, industrial, recreational, crops, animal husbandry, etc).

Existing maps or GIS data may be used to satisfy this requirement.

(d) **Documentation of Division of Water Quality classification of source water** - with reference to R317-2, provide documentation of the classification of the source waters by the Water Quality Board/Division of Water Quality (see also R309-605-9(1)), and of any associated petition for a change in classification.

(3) **DWSP Plan for New Sources of Drinking Water** - The PWS shall submit a DWSP Plan in accordance with R309-605-4 for any new surface water source of drinking water within one year after the date of the Director's concurrence letter with the PER. In developing this DWSP Plan, PWSs shall refine the information in the PER by applying any

new characteristics of the source.

R309-605-10. Contingency Plans.

PWSs shall submit a Contingency Plan which includes all sources of drinking water (groundwater and surface water) for their entire water system to the Director concurrently with the submission of their first DWSP Plan. The Contingency Plan shall address emergency response, rationing, water supply decontamination, and development of alternative sources.

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